

A STUDY ON DIVIDEND POLICIES OF LISTING COMPANIES IN CHINA

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## ABSTRACT

The Chinese stock markets have been operated for more than ten years, however, there are only a few researches on the impact of dividend policies to the listed Chinese firms. This study focuses on whether we can predict the future dividend amount; and whether the cash dividends can provide future signals for investors' decision. Based on 3882 cash dividend announcements from 654 firms, we can predict the current dividend amount by using information of previous dividend amount and current Earning Per Share (EPS). Nevertheless, we cannot predict change dividend change by using current EPS change. In addition, we are unable to figure out any significant signaling effect between the change in dividend and the abnormal returns, with the exception of our finding that a significant negative abnormal return will be retrieved when there is no change in dividends. As the result, we conclude that the signaling explanation cannot entirely explain why Chinese listed companies will pay dividends.

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## **CHAPTER I**

### **INTRODUCTION**

The ongoing economic reform from the Mainland Government introduces a new drive and promotes the transparency of the stock markets. The accession of WTO encourages foreign investors in acquiring leading Chinese companies in order to maintain a balanced portfolio. Traditionally, dividend yield is one of the major factors that to be considered by the institutional investors. Whilst dividend payment is always welcomed by every shareholder, companies that are too generous in dividend payment may reserve inadequate capital for future development and expansion. Therefore, every management of the listed companies considers carefully in adopting its dividend policy in order to fit the company's ongoing strategies, and at the same time, appropriate shareholder values have to be created.

In our studies, we would try to simulate the impact of dividend payment to the stock prices, with the pool of companies that being listed in the Chinese Stock Exchanges.



Financial modeling, namely “Fama and Babiak Model”, “The Percentage Adjusted Model PAM” and “CAR (Cumulative Abnormal Return) Analysis”, will be adopted in the following studies. Our primary objective is to define whether dividend policies will affect the stock prices severely and in what degree. Industry analysis, together with the references on capital sizes, will also be conducted in the following chapters. Since some listings in China do proceed dual-listing status in Hong Kong (known as “H” shares), we will indeed find out whether dividend policy will generate different degree of impact to companies with more than 1 listing status or not.

## **CHAPTER II**

### **HISTORY OF CHINA SECURITIES MARKETS**

In December 1990, the first Chinese stock exchange was established in Shanghai. Six months later, another stock exchange was operated in Shenzhen. The initial objective for the setting up of the Exchanges was to provide state-owned enterprises a medium to raise funds from the general public and introduce the business to the potential investors. Thus, under the ‘corporatisation of state-owned enterprises’ policy of the Mainland Government, several state-owned companies were converted to limited companies and being listed on the Exchanges. At the end of 2002, there were 715 and 508 companies listed in Shanghai Stock Exchange and Shenzhen Stock Exchange respectively. By the time, the Shanghai stock market capitalization had been reached to US\$306 billion; whilst the Shenzhen stock market capitalization had been valued to US\$156 billion (Note: USD1 = RMB8.28). Table 1 outlines the demography of Chinese Stock Market.

In 1992, the State Securities Committee and the Securities Regulatory Commission were set up, providing a mechanism to regulate the securities market. The State Securities Committee is the ultimate governing authority of the Chinese securities market. Its duties include: -

1. organizing and drafting of related laws and regulations,
2. preparing developmental strategies and plans,
3. guiding, coordinating, supervising, and reviewing the work of related central government agencies and local government bodies, and
4. monitoring the operations of the State Securities Regulatory Commission.

The State Securities Commission acts as the executive arm of the State Securities Committee and therefore plays an important role in development and day-to-day management of the securities market. For instance, listed companies have to submit various financial reports (including the prospectus, listing report, periodic reports, current reports and reports on intended takeover) to the Commission. Summaries of these reports have to be formally disclosed in newspapers that specified by the

Commission.

It is not a surprise that the State (or the municipal government) has the rights to own a proportion of shares of some Chinese listed companies, since a number of these companies are former state owned enterprises. In general, there are two types of shares that can be issued on the Stock Exchanges. One called 'A' shares, which are only available to investors in China. Another called 'B' shares, which are traded in terms of Hong Kong dollars (for Shenzhen Stock Exchange) or United State dollars (for Shanghai Stock Exchange). The "B" Shares are targeted to the non-domestic investors.

## CHAPTER III

### WHY FIRMS PAY DIVIDENDS

Extensive literatures had covered to the dividend policy of companies. As per Miller and Modigliani's discussion (1961), when there are no taxes or transaction costs and all investors are entirely informed about the distribution of the company's uncertainty on future cash flows, dividend policy is irrelevant. Somehow, dividend policy does not matter in some circumstances. However, it is a reality that many companies still pay dividend. Hence, dividend policy may occasionally matter. As the result, researchers have offered four universal explanations to discuss why firms pay dividends: the Bird-in-the-Hand, Signaling, Tax-Preference, and Agency cost explanations.

#### **The Bird-in-the-Hand Explanation**

According to this explanation, investors prefer dividend to uncertain share price

appreciation as the investors view distant dividend payments as riskier than current payments. Therefore, companies should set a high dividend payout ratio and offer a high dividend yield to maximize stock prices.

However, both Miller and Modigliani (1961) and Bhattacharya (1979) argue that Bird-in-the-Hand explanation is fallacious. It is because the risk of a firm should be based on riskiness of a company's cash flows. Increase of dividend payout today will result in an equivalent drop in the stock's ex-dividend price. As the result, increasing the dividend today cannot increase firm's value as the riskiness of future cash flows does not change (or is not predictable). The Bird-in-the-Hand explanation is therefore fallacious.

### **The Signaling Explanation**

Another explanation for paying dividends is using dividend policy to reveal information on the future prospect of a firm to investors. Signaling explanation emphasizes on the role of dividend policy under asymmetric information delivery. Information asymmetry suggests that corporate managers have more information than



outside investors. Hence, managers may use a change in dividends as a way to signal this private information and, thus, reduce information asymmetry. As the result, increase of dividend payout will generate a signal that the firm has enough future cash flows. The ongoing debt payments and dividend payments will not generate the risk of bankruptcy. This suggests that dividend changes should lead, rather than lag, earning changes and investors may use dividend announcements as the information to assess the appropriate stock price of a firm.

Ross (1977), Bhattacharya (1979, 1980), John and Williams (1985), Miller and Rock (1985), and Ofer and Thakor (1987) developed many models to assert this explanation. They found that there is a positive relationship amongst dividend policy changes, equity values, and subsequent performance. However, dividend changes may not be perfect signals. According to Easterbrook (1984), dividend increases may be an ambiguous signal, unless the market can distinguish between growing firms and disinvesting firms, i.e., those with a lack of investment opportunities. In addition, signaling explanation cannot explain cross-sectional differences in dividend payout across firms successfully.

### **The Tax-Preference Explanation**

It is obvious that taxation may affect the dividend policy. Investors may favor retention of funds over the payment of dividends because of the favorable treatment of capital gains over dividends. Hence, as previously mentioned, investors may prefer low dividend payout to high payout. This theory suggests that firms should keep dividend payments low if they want to maximize prices (via the impression of retaining capital for future development).

Masulis and Trueman (1986) showed that the cost of deferring dividends may be large enough to induce firms to optimally pay cash dividends. Shareholders with different tax rates will have different preferences on dividend decision. High tax bracket shareholders would prefer more investment and less dividend payout; whilst low tax bracket shareholders would prefer less investment and more dividend payout. Since tax effect differs from different types of investors, companies can adopt various dividend policies to attract certain type of investors from a particular tax bracket. Researchers call this as the tax clientele effect. Other things being equal, stocks with

low payouts should attract investors in high tax brackets, leaving high payout stocks to investors who are subjected to low or zero tax rates.

However, the empirical evidence on the tax-preference explanation of dividends is inconclusive. Litzenberger and Ramaswamy (1982) showed that stocks with large dividend yields have lower prices and offer higher returns. On the Contrary, Black and Scholes (1974) and Miller and Scholes (1982) reported that a firm's value is independent of dividend policy.

### **The Agency Explanation**

Agency theory was derived by Jensen and Meckling (1976) and was extended by Rozeff (1982) and Easterbrook (1984). This theory was based on the conflict of interests between corporate managers (agents) and outside shareholders (owners). Corporate managers may increase their personal wealth, in line with their decisions to the expense of the outside shareholders through more perquisites or shirking. As the result, the dividend mechanism provides an incentive for managers to reduce the agency costs. One way to reduce agency costs is to increase dividends. Paying

larger dividends reduces the internal cash flow that subjected to management discretion and forces the firm to seek more external financing. Seeking outside capital makes the firm to the scrutiny of the capital market for new funds and reduces the possibility of suboptimal investment. In addition, outside investors (or capital providers) will monitor the companies, ensuring that managers act in the best interest of outside shareholders. Thus, dividend payments may serve as a mean of monitoring or evaluating management performance. The agency costs explanation of dividends suggests that increases in dividends lag increases in profits and are uncorrelated with future profits.

Several empirical studies also provide support for the agency explanation for dividends. Rozeff (1982) found a supporting ground for the role of dividends in resolving agency costs in minority-manager-controlled firms. He pointed out that there is a negative relationship between dividend payout and the percentage of individual shareholders. If there are a lower percentage of individual shareholders, less dividends has to be paid to reduce agency costs. Additionally, he also verified that the variability of a firm's cash flows would affect its dividend payout. Moreover,

there is an optimal dividend policy as the strong cross-sectional regularities exist.

Crutchley and Hansen (1989) and Moh'd, Perry and Rimbey (1995) concluded that managers make financial policy tradeoffs, such as paying dividends, to control agency costs.



## **CHAPTER IV**

### **HOW TO DETERMINE THE AMOUNT OF DIVIDENDS TO PAY**

In Lintner's (1956) research, he interviewed selected companies to investigate how they determined the dividend. He found out that managers focused on the change in the current dividend payout ratio. In addition, most managers tried to avoid making changes in their dividend rates that might need to change within a year. Moreover, investment requirements generally had little effect on changing the dividend behavior.

Lintner (1956) suggested that the change in dividends is a function of the target dividend payout less the last period's dividend payout, multiplied by the speed of an adjustment factor. The target dividend payout is a fraction of the current period's earnings.

Many studies supported the model that being described by Lintner. Fama and Babiak (1968) found out that Lintner's model is one of the best two models to explain



dividend policy and to predict dividend payments one year later. Benartzi, Michaely and Thaler (1997, pp. 1032) concluded that "... Lintner's model of dividends remains the best description of the dividend setting process available." Studies from Baker, Farrelly and Edelman (1985) and Pruitt and Gitman (1991) were also coherent to Lintner's results.

### **Methodology**

### **Data Analysis**

We collected the 1) Daily Stock Prices, 2) Dividend Per Share and 3) Earning Per Share for all the companies listed on Shanghai Stock Exchange and Shenzhen Stock Exchange from 01 December 1990 to 31 July 2002. In general, there are 1146 listing shares (A and B shares) announced 5252 cash dividend events (included 3990 non-zero cash dividend announcements and others are zero cash dividends). 44 companies have no EPS data. The missing data are primarily due to: 1) incomplete information from Bloomberg; 2) we cannot find corresponding data from annual reports or other sources. We also filter the data to exclude the firms which either

have short listing time (Less than or equal to 2 years) or have short cash dividend history (Less than 2 years). Finally, as there are some companies have A and B shares and have same data, we exclude their B shares data. As the result, there are 654 firms with 3882 cash dividend announcements left in our dataset. The summary of data is recorded in Table 2. Table 3 and 4 show the number of change of Earning Per Share and Dividend Per Share respectively.

In addition, as shown in Table 5, about 26% of companies (n=833) have increased cash dividends, 37% of companies (n=1208) have decreased cash dividends and 37% (n=1187) of companies have not changed dividend amount. A casual inspection of Table 5 suggests that 57% of increase in cash dividends occurs when earnings increases. About 62% of decrease in cash dividends occurs when earning decreases. The chi-square test of the independence of the cash dividend and earning per share rejects the null hypothesis of independence. The chi-square value is 88.95. The correlation coefficient between cash dividend and current earning per share is 0.3878.

After we perform a correlation test between cash dividends and current earning per share, we find out that this test indicates there is high level of dependence (t-value = 23.96, which is significant at the 0.01 level).

### Model (L3)

#### Fama and Babiak Model

We use the model of Fama and Babiak (1968) to predict the next period's dividends.

The equation is:

$$\text{Div}_t = \alpha + \beta_1 \text{Div}_{t-1} + \beta_2 \text{EPS}_t + \varepsilon_t$$

where

$\text{Div}_t$  = Dividend per share at time t

$\text{Div}_{t-1}$  = Dividend per share at time t-1

$\text{EPS}_t$  = Earning per share at time t

$\varepsilon_t$  = the error term

After we run the regression model, we find out that all coefficients are found to be significant (See Table 6). However, this model can only explain 16% ( $R^2$ ) of dividend in the next period. As per our observation and understanding, this model may be improved by adding other variables such as previous Earning Per Share. Additionally, the coefficients of  $\text{EPS}_t$  is more than that of  $\text{Div}_{t-1}$ . This indicates that

the current year EPS can affect the current dividend in a greater extent than the previous year's dividend. Furthermore, the Intercept term is positive. This shows that Chinese listing companies have a tendency to pay cash dividends, no matter current EPS is positive or zero.

### **The Percentage Adjusted Model (PAM)**

We have made use the Percentage Adjusted Model to test the hypothesized positive link between institutional ownership and dividend policy. If changes in income are considered permanent and a firm has a desired payout ratio  $r$ , the association between changes in earnings ( $E$ ) and changes in dividends ( $D$ ), for firm  $i$  at time  $t$ , will be given by:

$$D_{it} - D_{(t-1)i} = \alpha + r(E_{it} - E_{(t-1)i}) + \mu_{it}$$

where,

$D_{it}$  = Dividend per share at time  $t$

$D_{(t-1)i}$  = Dividend per share at time  $t-1$

$E_{it}$  = Earning per share at time  $t$

$E_{(t-1)i}$  = Earning per share at time  $t-1$

However, the relationship between the difference in the dividend payout and earning per share are in absolute value, which is not being normalized. Taking an example of a company pay out 2 dollar as dividend at year 0 and pay out 3 dollars in the subsequence year, the difference in dividend is 1 dollar. But if we consider another company which pays out 10 dollar as dividend at year 0 and 11 dollar in the sequence year, the difference in dividend is also one dollar. Obviously, the amount of dividend paid out is being accounted; it just considers the absolute variation instead. Similarly, this insufficiency applies to the part of earning per share, which only determines the variation without taking the actual amount of earning per share into consideration.

We use the similar model of the full adjustment one with a modification of the absolute value. The percentage changes in dividend between two-time period and the percentage changes in earning per share are used for replacing the two absolute difference. The equation becomes:

$$\% \text{ change in } D_i = \alpha + \gamma (\% \text{ change in } E_i) + \varepsilon_i$$

where

$$\% \text{ change in } D_i = [ D_{ti} - D_{(t-1)i} ] / D_{(t-1)i}$$

$$\% \text{ change in } E_i = [ E_{ti} - E_{(t-1)i} ] / E_{(t-1)i}$$

$\varepsilon_t$  = the error term

After we run the regression model, we find out that the coefficients are found to be statistically significant (See Table 7). However, based on the tiny % for the calculated R Square, it is concluded that the % change in dividend cannot be explained by this model. Furthermore, the Intercept term is negative. It appears that Chinese listing companies have a tendency to reduce the dividend whenever there is a decline in profit.

It should be worth to note that some criteria were adopted in screening out the data for running the regression analysis. As all data including % change in dividend and the % change in earning per share may result in negative signs. There should be no negative value for dividend paid out, however, it is not entirely the case in earning per share, i.e. loss can be booked. Two scenarios are being found for negative % change



in earning per share. The usual explanation is that there is a decline in earning per share between period  $t$  and  $t-1$ . But for the case of having a negative earning per share in the period of  $t-1$ , even though there is a reducing drop (there is no such problem for an increasing drop in earning per share) in earning in the period  $t$ , the output will also be negative, which distorts the regression result.

Data (% change in earning per share) with “below -100%” are filtered out from the raw data. This assumption can be explained that company will not pay out dividend whenever there is a substantial loss in its fiscal year, say drop to zero or even recording a loss. With the use of this criterion, data fall in Scenario 2, unusual negative can be filtered out.

### **CAR Analysis**

We have used the CAR (Cumulative Abnormal Return) Analysis with 7 days window to show how shareholders react to the dividend announcements. If shareholders react positively to the announcements of change of cash dividends, the signaling theory can potentially explain the dividend puzzle in China. Table 8 shows the

Average Return (AR) and Cumulative Abnormal Return (CAR) from 7 days before the announcements of cash dividend to 7 days after.

From the Table, we can pinpoint that when there is a positive change in cash dividend, with a slightly positive CAR value (+0.23%), but not significant. When there is a negative change in cash dividend, the CAR value is slightly negative (-0.33%), but also not significant. However, when there is no change in cash dividend, the CAR value is notably negative (-2.56%). One explanation is that the signaling theory cannot explain the dividend puzzle in China. Another reason is that as most of Chinese companies provide stock dividends as well as cash dividends, the signaling theory may be still valid if we consider cash dividends and stock dividends at the same time.

## **CHAPTER V**

### **COMPANY CLASSIFICATIONS**

In our studies, we will follow the industry classification as defined by the Shanghai Stock Exchange and Shenzhen Stock Exchange. The former will categorize listings into 5 distinctive groups: -

Commercial, Industrial, Property, Utility and Miscellaneous

Whilst for the Shenzhen listings, companies will be classified into 22 specific industries, which are: -

Agriculture, Conglomerates, Construction, Electronics,  
Financials, Food & Beverage, IT, Machinery,  
Manufacturing, Media, Metals & Non-metals, Mining,

Paper & Printing, Petrochemicals, Pharmaceuticals, Real  
 Estate, Social Services, Textiles & Apparel, Timber &  
 Furnishings, Transportation, Utilities and Wholesale &  
 Retail

Table 9a and 9b show the Industry Classification for both Shenzhen and Shanghai Listings respectively as per the information up to end March 2003.

For the population that we consider in our studies, there are 9 companies in Shanghai and 1 company in Shenzhen with dual-listing status in Hong Kong as “H-shares”, which are recorded in Table 10.

The dividend yields of companies from different industry have been calculated as shown in Table 11. Unexpectedly, utility sectors in both Shanghai and Shenzhen Stock Exchanges are not very generous in dividend payment, with dividend yield of 32.21% and 40.52% respectively. However, utility industry in Shanghai is the highest dividend providers amongst the 5 sectors.

In Shenzhen, Mining Industry is the most generous sector in average payouts (87.53%), followed by Financial Industry (81.41%) surprisingly. There is no dividend payout for the Agriculture and Timber & Furnishings Industries (note: population is small as well). Additionally, the payout ratios from industries like Construction (4.56%), IT (18.42%), Manufacturing (16.80%) and Real Estates (18.7%) are relatively low.

We also examine the dividend payout trend with respect to the company market capitalization sizes. Table 12 shows the average dividend payout of companies with regard to their capitalization sizes. It is interesting to point out that the larger the market size of the companies, the higher the dividend payout that the companies adopted.



## **CHAPTER VI**

### **CONCLUSION**

After we run several models, we can predict the current dividend amount by using previous dividend amount and current Earning per share (EPS). However, we cannot predict dividend change by using current EPS change. In addition, we can conclude that there is a significant change in dividend if there is no change in EPS from the CAR Analysis. However, there is no significant change in dividend if there is change in EPS from the CAR test. As the result, we conclude that the signaling explanation cannot explain why Chinese listed companies will pay dividends.

We would suggest further studies should include not only the cash dividends, but also the stock dividends. Then the result may be more meaningful and conclusive. In addition, other tests, such as tax effect and agency cost, should also be adopted in order to generate a more thorough picture of the issue being discussed in this paper.



APPENDIX

**Table 1: Summary Data of Chinese Stock Market**

<i>Up to 31-Dec-2002</i>	<b>Shanghai Exchange</b>	<b>Shenzhen Exchange</b>
<b>No. of Listed Companies</b>	715	508
<b>Listed Companies with A Shares</b>	705	492
<b>Listed Companies with B Shares</b>	54	57
<b>Listed Companies Have A and B Shares</b>	44	41
<b>Listed Companies Only have B shares</b>	10	16
<b><i>Market Capitalization (billion USD)</i></b>		
<b>A Shares</b>	300.98	152.24
<b>B Shares</b>	5.34	4.35
<b>Total Market Capitalization</b>	306.33	156.59

**Table 2: Summary of Data**

	<b>No. of Firms Left</b>	<b>No. of Cash Dividend Events Left</b>
<b>Original Data Obtained</b>	1146	5252
<b><u>Minus</u> Missing EPS</b>	1102	5162
<b><u>Minus</u> Short EPS History</b>	1082	5125
<b><u>Minus</u> Short Dividend History</b>	734	4498
<b><u>Minus</u> Have A &amp; B Shares</b>	654	3882

**Table 3: EPS Change**

	<b>Total</b>	<b>Exclude first announcement</b>
<b>Increase</b>	2861	2207
<b>Decrease</b>	2277	2277
<b>No Change</b>	71	71
<b><i>Total</i></b>	<b>5209</b>	<b>4555</b>

**Table 4: Cash Dividend Change**

	<b>Total</b>	<b>Exclude first announcement</b>
<b>Increase</b>	1487	833
<b>Decrease</b>	1208	1208
<b>No Change</b>	1187	1187
<b><i>Total</i></b>	<b>3882</b>	<b>3228</b>

**Table 5: EPS Change and Cash Dividend Change**

EPS change\Div change	Increase	Decrease	No Change	Not Available	Total
Increase	476	445	551	735	2207
Decrease	342	751	621	563	2277
No Change	15	12	15	29	71
Total	833	1208	1187		

The chi-square test of independence of the cash dividend and earning per share: chi-square = 88.95

**Table 6: Regression Result - Fama and Babiak Model**

Regression Statistics	
Multiple R	0.4013
R Square	0.1610
Adjusted R Square	0.1605

**ANOVA**

	Df	SS	MS	F	Significance F
Regression	2	5.9764	2.9882	311.2673	0
Residual	3225	31.9600	0.0096		
Total	3227	36.9364			

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.0513	0.0019	26.4130	2.0418E-139
EPS <sub>t</sub>	0.1308	0.0056	23.2720	6.4813E-111
Div <sub>t-1</sub>	0.0326	0.0051	6.4181	1.58083E-10

**Table 7: Regression Result - The Percentage Adjusted Model (PAM)**

Regression Statistics					
Multiple R	0.0300				
R Square	0.0009				
Adjusted R Square	0.0006				
Standard Error	0.6289				
Observations	4471				

  

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	1.6025	1.6025	4.0516	0.0441
Residual	4469	1767.6531	0.39553		
Total	4470	1769.2557			

  

	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.1094	0.0094	-11.6083	1.0264E-30
% change in $E_i$	0.0025	0.0012	2.0128	0.0441



**Table 8: CAR summary**

Event Day	Increase		Decrease		No Change	
	AR	CAR	AR	CAR	AR	CAR
-7	0.03%	0.03%	-0.18%	-0.18%	-0.21%	-0.21%
-6	0.25%	0.28%	0.02%	-0.16%	-0.10%	-0.31%
-5	0.12%	0.41%	-0.15%	-0.31%	0.01%	-0.30%
-4	0.07%	0.48%	-0.05%	-0.36%	-0.13%	-0.43%
-3	-0.03%	0.45%	-0.01%	-0.38%	-0.14%	-0.57%
-2	0.09%	0.54%	0.06%	-0.31%	-0.17%	-0.74%
-1	-0.03%	0.51%	0.15%	-0.16%	-0.20%	-0.94%
0	0.45%	0.96%	-0.01%	-0.17%	0.03%	-0.91%
1	0.09%	1.05%	0.06%	-0.12%	0.00%	-0.92%
2	0.31%	1.36%	0.03%	-0.09%	-0.18%	-1.10%
3	-0.15%	1.22%	0.05%	-0.03%	-0.45%	-1.55%
4	-0.36%	0.85%	-0.17%	-0.21%	-0.46%	-2.01%
5	-0.41%	0.44%	-0.02%	-0.23%	-0.35%	-2.35%
6	-0.30%	0.15%	0.03%	-0.20%	0.07%	-2.28%
7	0.08%	0.23%	-0.12%	-0.33%	-0.28%	-2.56%



**Table 9a: Industry Classification – Shenzhen Listings**

<b>Industry (Index)</b>	<b>No. of Companies</b>
Shenzhen SE Agriculture Index	2
Shenzhen SE Conglomerates Index	36
Shenzhen SE Construction Index	8
Shenzhen SE Electronics Index	21
Shenzhen SE Financials Index	3
Shenzhen SE Food & Beverage Index	27
Shenzhen SE IT Index	29
Shenzhen SE Machinery Index	93
Shenzhen SE Manufacturing Index	6
Shenzhen SE Media Index	3
Shenzhen SE Metals & Non-metals Index	53
Shenzhen SE Mining Index	8
Shenzhen SE Paper & Printing Index	10
Shenzhen SE Petrochemicals Index	61
Shenzhen SE Pharmaceuticals Index	25
Shenzhen SE Real Estate Index	19
Shenzhen SE Social Services Index	20
Shenzhen SE Textiles & Apparel Index	29
Shenzhen SE Timber & Furnishings Index	1
Shenzhen SE Transportation Index	17
Shenzhen SE Utilities Index	22
Shenzhen SE Wholesale & Retail Index	35

**Table 9b: Industry Classification – Shanghai Listings**

Industry (Index)	No. of Companies
Shanghai SE Commercial Subindex	59
Shanghai SE Industrial Subindex	453
Shanghai SE Misc Subindex	125
Shanghai SE Property Subindex	16
Shanghai SE Utility Subindex	62

**Table 10: Companies that being dual-listed in Hong Kong**

Stock Exchange	Company Name
Shenzhen	Angang Newsteel Co Ltd.
Shanghai	China Eastern Airlines Corporation Ltd.
Shanghai	China Shipping Development Co Ltd.
Shanghai	Huaneng Power International Inc.
Shanghai	Jiangsu Expressway Co Ltd.
Shanghai	Maanshan Iron and Steel Co Ltd.
Shanghai	Sinopec Shanghai Petrochemical Co Ltd.
Shanghai	Sinopec Yizheng Chemical Fibre Co Ltd.
Shanghai	Tsingtao Brewery Co Ltd.
Shanghai	Yanzhou Coal Mining Co Ltd.

**Table 11: Dividend Payout – By Industry**

<b>Industry and Location of Listings</b>	<b>Average Payout Ratio</b>
Shenzhen SE Agriculture Index	0.00%
Shenzhen SE Conglomerates Index	24.44%
Shenzhen SE Construction Index	4.56%
Shenzhen SE Electronics Index	34.01%
Shenzhen SE Financials Index	81.41%
Shenzhen SE Food & Beverage Index	37.11%
Shenzhen SE IT Index	18.42%
Shenzhen SE Machinery Index	40.90%
Shenzhen SE Manufacturing Index	16.80%
Shenzhen SE Media Index	40.10%
Shenzhen SE Metals & Non-metals Index	40.07%
Shenzhen SE Mining Index	87.53%
Shenzhen SE Paper & Printing Index	43.00%
Shenzhen SE Petrochemicals Index	39.39%
Shenzhen SE Pharmaceuticals Index	24.67%
Shenzhen SE Real Estate Index	18.71%
Shenzhen SE Social Services Index	50.14%
Shenzhen SE Textiles & Apparel Index	24.01%
Shenzhen SE Timber & Furnishings Index	0.00%
Shenzhen SE Transportation Index	33.38%
Shenzhen SE Utilities Index	40.52%
Shenzhen SE Wholesale & Retail Index	29.75%
Shanghai SE Commercial Subindex	15.67%
Shanghai SE Industrial Subindex	18.85%
Shanghai SE Misc Subindex	21.15%
Shanghai SE Property Subindex	16.28%
Shanghai SE Utility Subindex	32.21%



**Table 12: Dividend Payouts – By Market Capitalization Size**

Capital Size (US\$)	Average Payout Ratio
Below 100000000	23.89%
100000000 - 250000000	30.75%
250000001 - 500000000	36.22%
500000001 - 1000000000	38.44%
1000000001 - 5000000000	42.93%
Above 5000000001	44.13%

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